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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,078	03/02/2004	Chin Ju Liu	3107-151	2536

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EXAMINER

HUGHES, JAMES P

ART UNIT PAPER NUMBER

2883

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/790,078	Applicant(s) LIU, CHIN JU	
	Examiner James P. Hughes	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 1,2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because it fails to clearly identify that which applicant claims as the instant invention. The claim recites the limitation “a cylindrical sheath ... for receiving the bundle of optical fibers, an aperture through a closed end of the sheath, and an annular neck”. These limitation are unclear because they do not require the three elements – the sheath, the aperture, and the annular neck – to be part of the same structure; and in order for the sheath to have an aperture through a **closed end**, it would need to have a reduced portion. Otherwise, it is unclear as to what would constitute the “closed end” if it were not a reduced portion.

Appropriate correction is required.

2. Claim 2 is objected to it fails to clearly identify that which applicant claims as the instant invention. The claim recites the limitation “a narrow portion which is susceptible of break.” This limitation is unclear because it does not clearly define what “susceptible of break” entails.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al. (3,999,837). First, a note on claim interpretation. Claim 1 is a product by process claims and following has been examined for structure that would be capable of providing the function of the various intended use statements recited in the claims. See MPEP 2113. Additionally, the following rejections were made in light of the best interpretation of the claims in view of the objections set forth above.

Bowen et al. (3,999,837) teaches a connector of a bundle of optical fibers (20) comprising: a ferrule member (18) comprising an axial lower channel (e.g. 26 or 126) and an axial upper tunnel (e.g. 28 or 128) in communication with the channel; and a rigid, cylindrical sheath (e.g. 30 or 130) received in the tunnel and comprising a bore having a diameter (see e.g. the right side of 30 in Fig. 4) about the same as that of the channel for receiving the optical fibers (20), an aperture through a closed end of the sheath, and an annular neck with an inclined surface – see e.g. the left side of 30 in Fig. 4 or 44 in Fig. 4 as the claim does not require the annular neck to be part of the sheath. Following, when optical fibers are inserted into the ferrule member (18), there will be a narrow section (e.g. at least that section between 30 and 32 in Fig. 4) around the bundle of fibers. (See e.g. Col. 3, ll. 35 – Col. 4, ll. 25 and Figs. 4, 11, 13, and 14)

Bowen further teaches a cylindrical base (e.g. 14 or 116) with a second channel having a diameter about the same as that of the channel and being in communication therewith so as to receive the bundle of optical fibers, and an upper socket (e.g. the area that closes around the ferrule in Fig. 13) for fastening a lower portion of the ferrule therein. (See e.g. Col. 3, ll. 35 – Col. 4, ll. 25 and Figs. 4, 11, 13, and 14)

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It is unclear, based on the interpretation of the claim and the reference, whether the cylindrical sheath structure (e.g. 30 or 130) is a secondary member placed in the ferrule, or a portion of the ferrule. There for a 35 U.S.C. 103 rejection of obviousness has been made. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the sheath member (e.g. 30 or 130) with a secondary element for insert into the ferrule member (18) because this would allow a selection of different materials propertied for this section of the device. One would have been motivated to do so because this would allow an efficient method of crimping the optical fibers in the conical section.

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McCartney et al. (4,021,098) and (4,092,396) teach a fiber bundle consolidations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James P. Hughes whose telephone number is 571-272-2474. The examiner can normally be reached on Monday - Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James P. Hughes  
Patent Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800